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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 03/25/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,698

Applicant(s)

LANG ET AL.

Examiner

Alexis Wachtel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Detailed Action

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 -72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 1-7,56 are rejected as being indefinite because they fail to set forth the composition or structure of the wet wipe and only claim properties of tensile strength. Claims that merely set forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future. Ex parte Slob (PO BdApp) 157 USPQ 172.
4. Per claims 1-7,32,39-44,56 and 61-66, the phrase "in-use" is recited. What does this mean? Would the wipe being inside a package constitute being in use or would it actually have to be being used? If so, what types of use is Applicant referring to? How would tensile strength change during use?

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8, 11-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 6,277,768B1 to Mumick et al.

Mumick et al is directed to water dispersible products such as diapers, tampons, feminine pads, pantliners, etc. which contain a temperature responsive binder and/or thermoformable articles comprising N-isopropyl acrylamide (NiPAm) polymers (Col 1, lines 10-25). Although Mumick et al fails to identify nonwoven wipes as useful when rendered water dispersible, one of ordinary skill would have recognized that diapers, feminine pads and nonwoven wipes are in the same field of endeavour: that of personal care and would have been obvious.

With regards to claims 1-8, 11-13 although Mumick et al does not explicitly teach the claimed tensile strengths of the nonwoven wipe on immersion of said nonwoven wet wipe in varying concentrations of multivalent ions in water, opacity, or cup crush amount, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of a nonwoven wipe. The burden is

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upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed tensile strengths of the nonwoven wet wipe on immersion of said nonwoven wipe in varying concentration of multivalent ions in water would obviously have been provided by the process disclosed by Mumick et al. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-23, 32-34 and 36-37 and 39-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,648,083 to Blieszner et al further in view of US 5,312,883 to Komatsu et al.

Blieszner et al is directed to wipe products and teaches a nonwoven wipe made from about 1% to 99% by weight cellulosic fiber, and from about 99% to 1% by weight synthetic polymeric fibers. Said synthetic polymeric fibers include rayon, polyolefin and polyester. The nonwoven may be treated to join the fibers of the nonwoven to enhance the strength of the nonwoven. Such a treatment may involve hydro-entanglement, thermal bonding or the treatment with a binder (Col 13, lines 2-25). Such disposable wipes are typically pre-moistened with a composition containing 94% or more of water and various combinations of other ingredients including moistening agents or

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humectants, emollients, surfactants, emulsifiers, antimicrobial agents, skin protectants, pH-adjusting agents, fragrances, powders and the like (Col 2, lines 3-12). The composition also contains a silicone oil and an emulsifier (Col 3, lines 32-36). It is preferred that the composition contain from 91% to 99.5% water by weight of the composition which meets Applicant's limitation of less than 10% weight of organic solvent (Col 4, lines 32-36).

Regarding claims 8-10, 45-47 and 71, Blieszner fails to teach the claimed wipe thickness. However, since the wipe thickness is directly proportional to the strength of the wipe, it would have been obvious for one of ordinary skill to have determined the optimal wipe thickness through the process of routine experimentation.

Regarding claims 1-7, 11-13, 39-44, 48-50, 54-56, 61-66, 70 and 72 although Blieszner does not explicitly teach the claimed tensile strengths of the nonwoven wipe on immersion of said nonwoven wet wipe in varying concentrations of multivalent ions in water, opacity, or cup crush amount, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of a nonwoven wipe. The burden is upon the Applicant to prove otherwise. In the alternative, the claimed tensile strengths of the nonwoven wet wipe on immersion of said nonwoven wipe in varying concentration of multivalent ions in water would obviously have been provided by the process disclosed by Blieszner.

Blieszner et al fails to teach the specific binder used to facilitate structural integrity of the nonwoven wipe product. Blieszner et al fails to teach, in addition, the activating compound used in the aqueous composition that impregnates said nonwoven

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wipe product. Komatsu et al is directed to water soluble polymers soluble to salt and teaches a polymer whose solubility in water changes on a slight difference in the concentration of a salt contained in the water and more specifically to a salt-sensitive polymer which is soluble in a usual tap water but is insoluble in an aqueous solution containing not less than 0.5% by weight of a neutral inorganic salt comprising a monovalent salt such as NaCl, KCl, NaBr (Col 1, lines 5-13). Komatsu et al teaches that it is known in the art that when an inorganic salt which is an electrolyte is added in an increasing amount to an aqueous solution of a water soluble polymer, the polymer is salted out to form a precipitate. It has also been known that salts are contained in human bodily fluids such as urine in the amount of at least 0.5% by weight. It is supposed, therefore, that, when a non-woven fabric or paper is bonded with a binder comprising a polymer which is soluble in tap water, but insoluble in an aqueous solution containing salt in an amount of 0.5% by weight, the resulting product will have a sufficient strength when brought into contact with a body fluid, but the product will be easily dispersed in a flush toilet (Col 1, lines 14-28). Said water soluble polymer is a copolymer of acrylic acid and a vinyl monomer wherein the vinyl monomers include 2-ethylhexyl(meth)acrylate and lauryl (meth)acrylate (Col 2, lines 23-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made use of said water soluble polymer as a binder in Blieszner et al's nonwoven wet wipe and have added a salt such as NaCl, KCl or NaBr in an amount no less than 0.5% by weight of the aqueous solution or wetting composition it is dissolved in, as per above teachings, to the wetting composition used

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in said nonwoven wet wipe motivated by the desire to obtain a wet wipe product that will disintegrate on disposal via a flush toilet but remain intact when in contact with a wetting composition comprising, predominantly water, which would otherwise cause said nonwoven, with said water soluble polymer to disintegrate.

With regards to claim 32, although the claimed tensile strengths of the nonwoven wet wipe are not explicitly taught by Blieszner et al or Komatsu et al, it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. ion-sensitive binder and fibrous material) used to produce the nonwoven wet wipe. The burden is upon the Applicant to prove otherwise.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,648,083 to Blieszner et al in view of US 5,312,883 to Komatsu et al as set forth above

Blieszner et al in view of Komatsu et al as set forth above fails to teach the claimed amount of NaCl present in the wetting composition as the activating compound.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the claimed weight percent range of NaCl in the wetting composition motivated by the desire to optimize the wetting composition's chemical interaction with the nonwoven wipe, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum ranges involves only routine skill in the art. *In re Aller*, 2208.2d454 105 USPQ 233. (CCPA 1955). Examiner notes that claim 29 reads as zero on components other than water and NaCl.

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10. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,648,083 to Blieszner et al in view of US 5,312,883 to Komatsu et al as set forth above, further in view of US 2001/0053753A1 to Engekhardt.

US 5,648,083 to Blieszner et al further in view of US 5,312,883 to Komatsu et al as set forth above fail to teach a wetting composition that comprises a fragrance solubilizer, the use of preservatives as well as the claimed amounts of the claimed components present in said wetting composition.

Engekhardt is directed to personal cleansing compositions and teaches that it is well known in the art to use a fragrance solubilizer to solubilize fragrances (pp 1, Col 2, [0013]). In view of this teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a fragrance solubilizer in the wetting composition of the wet wipe nonwoven as set forth above by Blieszner et al in view of Komatsu et al motivated by the desire to eliminate fragrance gradients in said wetting composition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a preservative in the wetting composition since is well known in the art to stabilize, via chemical means, the functional integrity of cleaning fluids of which said wetting composition is an example of.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the claimed weight percent range of preservatives, surfactants, silicone emulsions, emollients, fragrances and fragrance solubilizers in the wetting composition motivated by the desire to optimize the wetting composition's

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chemical interaction with the nonwoven wipe, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum ranges of components involves only routine skill in the art. *In re Aller*, 2208.2d454 105 USPQ 233. (CCPA 1955).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the claimed chemical components in the claimed amounts in the wetting composition since it is well known in the art that the claimed components are routinely used as components in cleansing substances.

11. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,648,083 to Blieszner et al in view of US 5,312,883 to Komatsu et al as set forth above, further in view of US 6,121,170 to Tsai et al.

Blieszner et al in view of Komatsu et al as set forth above fail to teach the length of the fibers used in the wet wipe nonwoven. Tsai et al is directed to water dispersible fabrics, fibers and films (Abstract) and teaches that suitable fiber lengths in such products are from 0.2 to 15mm (Col 5, lines 35-45). It would have been obvious to one of ordinary skill in the art to use fibers of the disclosed length in the wet wipe nonwoven motivated by the desire to obtain a wet wipe nonwoven having sufficient resiliency.

12. Claim 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,648,083 to Blieszner et al in view of US 5,312,883 to Komatsu et al as set forth above further in view of US 6,277,768 to Mumick et al.

Blieszner et al in view of Komatsu et al as set forth above fails to teach the claimed co-binder used additionally with the ion-sensitive polymer as disclosed above.

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Mumick et al is directed to temperature sensitive polymers and water-dispersible products and teaches that water-dispersible binders can be blended from more than one chemical wherein the second chemical or co-binder can be polyethylene vinyl acetate (Col 7, lines 2-34). Examiner notes that polyethylene vinyl acetate as disclosed by Mumick et al is assumed to be non-crosslinking. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a second binder or co-binder with the ion sensitive polymer binder for use in the wet wipe disclosed above, motivated by the desire to improve the binding properties of the resulting blended binder.

13. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,648,083 to Blieszner et al in view of US 5,312,883 to Komatsu et al as set forth above further in view of US 5,384,189 to Kuroda et al.

Blieszner et al in view of Komatsu et al as set forth above fails to teach a wet wipe nonwoven wherein the fibrous material used to make the nonwoven comprises wood pulp. Kuroda et al is directed to water decomposable nonwoven fabric and teaches that wood pulp is a conventionally used fiber in making nonwoven fabrics ideal for use as wet wipe nonwovens (Col 1, lines 5-25) and (Col 2, lines 15-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used wood pulp as one of the fiber materials to make the wet wipe nonwoven motivated by the desire to make use of an inexpensive material for the production of the wet wipe nonwoven.

Conclusion

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14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Glenn Caldarola can be reached at (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



ELIZABETH M. COLE
PRIMARY EXAMINER